Appln. No. 09/762,073 Amdt. Dated June 3, 2004 Reply to Office action of March 25, 2004

## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

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- 1. (currently amended) A radio Radio communications apparatus having a transmission power control feature for controlling the transmission power of a local station by using the a transmission power control bit transmitted from a distant station to the local station, comprising:

  communication state detector which detects the a communication state based on the reception power of a received signal transmitted from the distant station; and transmission power control range changer which changes the a transmission power control range corresponding to the transmission power control bit based on the detected communication state.
- 2. (original) The radio communications apparatus
  2 according to claim 1, wherein said communication state
  3 detector has a reception power change detector which detects a
  4 change in reception power in a local station.
- 3. (original) The radio communications apparatus
  2 according to claim 1, wherein said communication state
  3 detector has a distant station transmission power change
  4 detector which detects a change in transmission power in a
  5 distant station.
- 4. (original) The radio communications apparatus according to claim 1, wherein said communication state detector has a control state detector which detects the

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- 4 control state of the local station.
- 5. (original) The radio communications apparatus
- 2 according to claim 1, wherein said communication state
- 3 detector has a local station transmission power change
- 4 detector which detects a change in transmission power in the
- 5 local station.

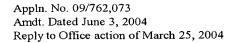
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- 6. (original) The radio communications apparatus according to claim 1, wherein said communication state detector has a transmission power control bit change detector which detects a change in said transmission power control bit.
- 7. (original) The radio communications apparatus according to claim 2, wherein said reception power change detector has a reception power comparator which compares a previous reception power with a current reception power.
- 8. (original) The radio communications apparatus
  2 according to claim 2, wherein said reception power change
  3 detector has a fading pitch detector which detects the fading
  4 pitch of reception power
- 9. (original) The radio communications apparatus
  according to claim 2, wherein said reception power change
  detector has a reception power threshold comparator which
  compares the reception power with a predetermined threshold.
- 1 10. (currently amended) A transmission power control
  2 method for <u>a</u> radio communications apparatus for controlling
  3 transmission power of a local station by using a transmission
  4 power control bit transmitted from a distant station to the
  5 local station, comprising:



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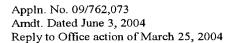
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6	a communication state detecting step which detects $rac{ ext{the}}{ ext{c}}$
7	communication state based on the reception power of
8	a received signal transmitted from the distant
9	station; and

- a transmission power control range changing step which changes the a transmission power control range corresponding to the transmission power control bit based on the detected communication state.
- 11. (original) The transmission power control method for radio communications apparatus according to claim 10, wherein said communication state detecting step has a reception power change detecting step which detects a change in reception power in a local station, wherein said transmission power control range changing step changes the transmission power control range depending on the detected change in reception power.
- 12. (original) The transmission power control method for radio communications apparatus according to claim 10, wherein said communication state detecting step has a distant station transmission power change detecting step which detects a change in transmission power in a distant station and a reception power change detecting step which detects a change in reception power in a local station, wherein said transmission power control range changing step changes the transmission power control range depending on the detected change in transmission power in the distant station and the detected change 12. in reception power in the local station.
  - 13. (original) The transmission power control method for radio communications apparatus according to claim 10, wherein



said communication state detecting step has a control

state detecting step which detects the control state

of a local station, wherein

said transmission power control range changing step

changes the transmission power control range

depending on the detected control state.

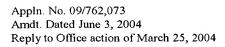
14. (original) A transmission power control method for radio communications apparatus according to claim 10, wherein said communication state detecting step has a local station transmission power change detecting step which detects a change in transmission power in a local station and a transmission power control bit change detecting step which detects a change in the transmission power control bit, wherein said transmission power control range changing step changes the transmission power control range depending on the detected change in transmission power in the local station and the detected change in the transmission power control bit.

15. (original) The transmission power control method for radio communications apparatus according to claim 11 or 12, wherein

said reception power change detecting step has a reception power comparing step which compares a previous reception power with a current reception power, wherein

a change in reception power is detected based on the comparison results of the reception power comparing step.

16. (original) The transmission power control method for



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radio communications apparatus according to claim 11 or 12, 2 3 wherein said reception power change detecting step has a fading 4 pitch detecting step which detects the fading pitch 5 of reception power, wherein 6 7 a change in reception power is detected based on the detected fading pitch. 8 17. (original) The transmission power control method for 1 radio communications apparatus according to claim 11 or 12, 2 wherein said reception power change detecting step has a reception power comparing step which compares a previous reception power with a current reception power and a fading pitch detecting step for 7 detecting the fading pitch of reception power, 8 wherein 9 10 a change in reception power is detected based on the comparison results of the reception power comparing 11 step and the detected fading pitch. 12 18. (original) A transmission power control method for 1 2 radio communications apparatus according to claim 11 or 12, 3 wherein said reception power change detecting step has a 4 5 reception power threshold comparing step for 6 compares the reception power with a predetermined threshold, wherein 7 a change in reception power is detected based on the 8 9 comparison results of the reception power threshold 10 comparing step 19. (currently amended) A computer-readable recording 1

medium stored as for storing a program for use by a computer

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for executing the transmission power control method for the
radio communications apparatus according to any one of claims
10 through 18.